2.7 HUMAN RESOURCES ACCOUNTING

All the process of the organization is operated by human resources is very necessary and information about the valuation should be given to the investor. The management and other through financial statements.

Human resources accounting is basically an information system that tells management what changes are occurring over time to the human resources of the business. In the early 1990s industries were recognized the value and importance of human assets when service sector started major contribution to a country's economy the significance of human assets got prominence.

The American Accounting Association's Committee on Human Resource Accounting (1973) has defined Human Resource Accounting as "the process of identifying and measuring data about human resources and communicating this information to interested parties". HRA, thus, not only involves measurement of all the costs/ investments associated with the recruitment, placement, training and development of employees, but also the quantification of the economic value of the people in an organization.

According to American Accounting Society Committee "Human Resource Accounting is the process of identifying and measuring data about human resources and communicating this information to interested parties."

According to Woodruff "Human Resource Accounting is an attempt to identify and report investments made in human resources of an organization that are presently not accounted for in conventional accounting practice. Basically it is an information system that tells the management what changes over time are occurring to the human resource in the business."

According to Davidson and Roman L Weel "A term used to describe a variety of proposals that seek to report and emphasize the importance of human resources - knowledgeable, trained and loyal employees in a company earning process and total assets."

Thus Human Resource Accounting (HRA) is a new branch of accounting. It is based on the traditional concept that all expenditure of human capital formation is treated as a charge against the revenue of the period as it does not create any physical asset. But now a day this concept has changed and the cost incurred on any asset (as human resources) should be capitalized as it yields benefits measurable in monetary terms.

Human Resource Accounting means accounting for people as the organizational resources. It is the measurement of the cost and value of people to organizations. It involves measuring costs incurred by private firms and public sectors to recruit, select, hire, train and develop employees and judge their economic value to the organization.

Objective of Human Resources Accounting

- To furnish cost value information for making proper and effective management decisions about acquiring, allocating, developing and maintaining human resources in order to achieve cost effective organizational objectives.
- To monitor effectively the use of human resources by the management.
- To have an analysis of the human assets i.e. whether such assets are conserved, depleted or appreciated.
- To aid in the development of management principles and proper decision making for the future by classifying financial consequences of various practices.
- In all, it facilitates valuation of human resources recording the valuation in the books of account and disclosure of the information in the financial statement.
- It helps the organization in decision making in the following areas:

Direct Recruitment vs. promotion, transfer vs. retention, retrenchment vs. retention, impact on budgetary controls of human relations and organizational behavior, decision on reallocation of plants closing down existing units and developing overseas subsidiaries etc.

Human Resources Accounting Practice in India

Indian Companies Act 1956 does not provide any scope for shown any information about human resources in Financial Statement. The companies who are presently reporting human assets valuation include :

- National Thermal Power Corporation Ltd. (NTPC)
- Association Cement Company ltd. (ACC)
- Southern Petrochemical Industries Corporation Ltd. (SPIC)
- Tata Engineering and Locomotive Works
- Infosys Technologies Ltd.
- Cement Corporation of India (CCI)
- Hindustan Shipyard Ltd.
- Electrical Media Ltd.
- Mineral and Metal Trading Corporation of India (MMTC)
- Engineers India Limited
- Project and Equipment Corporation of India (PEC)
- Oil India Ltd.
- Oil and Natural Gas Commissioning (ONGC)
- Steel Authority of India ltd. (SAIL)
- Bharat Heavy Electrical Ltd. (BHEL)

Valuation of Human Resources

(a) Historical Cost Method
(b) Replacement Cost Method
(c) Opportunity Cost Method
(d) Lev- Schwartz Model
(e) Hermanson's Model
(f) Human Assets Multiplier Method
(g) Economics Value Method

(a) Historical Cost Method : This model of accounting of human resources was first initiated by Rinses Likert at R.G.Bary Corporation in Ohio Columbia (USA) in 1967. Historical Cost Method Calculates actual cost incurred on recruiting, selecting, hiring and training and development of human resources (HR) which is equal to the value of workforce. The economics value of HR increases overtime and they gain experience. However according to this model the capital cost of HR decreases through amortization.

(b) Replacement Cost Method : This method of valuation of human resources was developed by Eric G. Flamholtz on the basis of concept of replacement cost suggested by Rensis Likert. According to this model the value of employer is estimated as the cost of replacement with a new employee of equivalent ability and efficiency. There are two costs **individual replacement cost and positional replacement** cost in this model.

Cost of recruiting, Selecting, training and development and familiarization cost are account in individual replacement cost when an employee present position to another or leave the organization cost of moving, vacancy carrying and other relevant costs reflects in individual replacement cost.

Position replacement cost refers to the cost of filling different position in an organization and this model is highly subjective in nature.

(c) Opportunity Cost Method : This model of HRA seeks to measure the value of human resources on the basis of common concept of opportunity cost. This model was proposed by Hekimian and Jones to overcome the limitations of replacement cost model. It attempts to estimate the value of human resources by establishing an internal labour market in an organization through the process of competitive bidding.

Under this model all managers of profit centers are encouraged to bid for any scarce employee they want. This is largely artificial method involving the concept of the competitive bidding process. Under this system, profit center managers are encouraged to bid for scarce employees, the successful bid being included in the organization's human investment calculations.

Employee abilities are related to profit generation, and may lead to a more efficient allocation of human resources. The employee is allotted to the highest bidder among the divisional managers and the bid price is included in that division's investment base. The authors of this approach claim that this bidding process is helpful in :

More optimal allocation of human resource and Planning, developing and evaluating human resources of a business as it provides a quantitative base for decision making.

The following are the limitations of Opportunity Cost Model;

(a) Firstly, it excludes the value of employees who can be readily hired.

(b) Secondly, circumstances in which the manager would like to bid will be very rare. Moreover, no employee would like to be treated as a saleable commodity.

(d) Lev- Schwartz Model : Stochastic Rewards model was developed by Eric G. Flamheltz. This model identified some major variables that are help to determine the value of an individual to the organization. He determined the movement of the employee from one organization to another as stochastic process.

The model of HRA given by Lev and Schwartz ignored the possibility of death prior to retirement age. The model given by Lev and Schwartz can be considered as an improvement over the cost models as it seeks to value the human resources of an organization on the basis of the economic value of employees of total organization.

Flamholtz has measured the expected realizable value of an individual:

$$V_\tau = \sum_{t=\tau}^{T} \frac{I(t)}{(1+r)^{t-\tau}}$$

where, $V\tau$ = the value of human capital of a person t years old.

$I(\tau)$ = the annual earnings of the person upto retirement.

r = the discount rate of the cost of capital.

T = the age of retirement.

The model suffers from certain deficiencies as it ignores that :

- The individual's value to an organization depends upon the role in which an individual's is placed in addition to his qualities, traits and skills;
- Employees change their roles during their career due to promotion, transfer etc. and
- An individual may leave the organization for reasons other than death and retirement.

(e) Hermanson's Model : Roger H. Hermanson has suggested two models for the measurement of human resources; one is unpurchased goodwill model and the other is adjusted discounted future wages model.

Under the first model it is argued that super normal profits in a firm are the indicators of presence of human resources. The model requires computation of the ratio of net income after taxes (EAT) to total assets (excluding human assets) of each firm. This in turn is compared with the ratio for the industry as a whole. The value of human resources of a firm is then measured with the help of differential rates.

This method uses a weighted average of the last five years of performance, to modify the present value (discounted at the rate of return of the economy last year) wages expected to be paid over the next five years.

The method begins by calculating the present value of wages that are estimated to pay over the next five years. Then calculate what Hermanson calls the efficiency ratio that is given by the following equation:

$$\text{Efficiency Ratio} = 5\left(\frac{R_{f_0}}{R_{g_0}}\right) + 4\left(\frac{R_{f_1}}{R_{g_1}}\right) + 3\left(\frac{R_{f_2}}{R_{g_2}}\right) + 2\left(\frac{R_{f_3}}{R_{g_3}}\right) + 1\left(\frac{R_{f_4}}{R_{g_4}}\right)$$

where, R_{f_V} = Rate of accounting income on owned assets for firm for current year;

R_{e_a} = Average rate of accounting income on owned assets for all firms in economy for current year;

R_f = Rate of accounting income on owned assets for firm for fourth year previous;

R_{e_y} = Average rate of accounting income on owned assets for all firms in economy for fourth year previous.

If a given company earn exactly the return that on average all firms in the economy gained each year, the efficiency ratio would equal one. Alternatively, if the resources were more efficient than an average, the ratio would exceed one and in case of below average, less than one. The next step is to multiply the present value of payments to the human resources efficiency ratio. Hermanson said the preferred method goodwill is not purchased.

Hermanson believes that the attempt to enhance the human resources should be made in the annual financial statement and not on its own. Hence his emphasis on balance.

(f) Human Assets Multiplier Method : This method assumes that there is no direct relationship between cost incurred on an employee and his value for the organization. This is because the value of an employee depends on factors like motivation, working conditions and their attitude toward work and organization. In this method, all employees working in an organization are broadly classified into four categories; viz., top management, middle management, supervisory management and operative and clerical staff.

The salary bill of each category is multiplied with appropriate multiplier to ascertain the total value of each category for the organization at a given point of time. Here, multiplier is an instrument that relates the personal worth of employees with the total asset values of the organization.

As per principle, the value of human asset should match with the value of goodwill. Inconsistency in the value of human assets in comparison to goodwill is indicative of inaccuracy in multiplier that should be adjusted accordingly.

(g) Economics Value Method : Under this method, human asset is valued on the basis of the contribution they are likely to make to the organization till their retirement from the jobs. The payments made to them in the form of pay, allowances, benefits, etc., are estimated and then discounted appropriately to arrive at the present economic value of the individuals.

Economic Value Added (EVA) or Economic Profit is a measure based on the Residual Income technique that serves as an indicator of the Profitability of projects undertaken. Its underlying premise

consists of the idea that real profitability occurs when additional wealth is created for shareholders and that projects should create returns above their Cost of Capital.

$$\frac{\text{Economic Value Added}}{\text{EVA} = \text{NOPAT} - (\text{WACC} * \text{capital invested})}$$

EVA adopts almost the same form as residual income and can be expressed as follows :

EVA = NOPAT – (WACC * capital invested)

Where NOPAT = Net Operating Profits After Tax

WACC = Weighted Average Cost of Capital

Capital invested = Equity + long-term debt at the beginning of the period and **(WACC* capital invested)** is also known as **finance charge**